REMARKS

Applicant has carefully reviewed and considered the Office Action of 10 April 2007, including the cited prior art. Applicant appreciates that Examiner has fully considered Applicants arguments filed on 10/25/2006, and thanks Examiner for the further explanation of the rejection. Nevertheless, Applicant puts forth that the claims of the present application are patentable over the cited prior art. In response to Examiner's rejection, Applicant makes the following remarks.

Review of the Nelson Reference (US 6,347,027)

Examiner again relies on the Nelson reference as a basis for a rejection of all independent claims (1, 14, and 21) under 35 U.S.C. §102. This continued rejection relying on the Nelson reference warrants a review of the art disclosed in the Nelson reference.

The Nelson reference discloses a "method and apparatus for automated reconfiguration of an electric power distribution system with enhanced protection". Nelson, title. One purpose disclosed by the Nelson reference is "the use and coordination of information conveyed over communications to dynamically modify the protection characteristics of distribution devices." Nelson, Abstract. Further, the Nelson reference discloses that "[i]n this way, overall protection and reconfigurability of the distribution system or 'team' is greatly enhanced." *Id.*

As indicated by Examiner, one aspect of the method and apparatus disclosed in the Nelson reference is a "protective device add-on board". Nelson, column 30, line 15 through column 31, line 38. It is appreciated by Applicant that these "add-on boards support retrofit of products configured *according to existing, prepackaged line recloser controls* and substation breakers." Nelson, column 30, lines 21-23, (emphasis added).

This does not teach or suggest that the *recloser control* of Nelson is in any way "compatible with various reclosers" or that it includes a "control interface system that provides control signals for a plurality of various reclosers". On the contrary, the recloser control of the Nelson reference is existing and prepackaged.

The Nelson reference *differentiates* between the recloser control and the add-on board. For example, Nelson states that "[t]he team reconfiguration logic is entirely contained in the memory 1105 and CPU 1106 of the add-on board, while the circuit protection logic and *active switching functions remain in the recloser control.*" Nelson, column 30 lines 30-33 (emphasis

added). Thus, the Nelson reference teaches that the recloser control and the add-on board are separate.

It is important to note that Nelson does not describe that the add-on board replaces the recloser control or that the recloser can operate with the add-on board but not the recloser control. Instead, the add-on board is in communication with the recloser control. Indeed, the Nelson reference describes in detail how the add-on board and the existing, prepackaged line recloser control communicate, and how their logic functions and protection schemes are shared and divided. *See* Nelson, column 30 line 37 through column 31 line 33.

It is also important to note that the Nelson reference does not disclose that the add-on board includes any sort of charging system for producing control voltages to control trip and close coils. Instead, Nelson discloses that the "active switching functions *remain in the recloser control*." Nelson, column 30 lines 32-33.

That is, according to the Nelson reference, the add-on board uses digital communications (Nelson, column 30 lines 36-38) to communicate with the existing, prepackaged line recloser control, and the existing, prepackaged line recloser control includes the active switching functions for the recloser (such as the charging system for producing control voltages to control trip and close coils).

Thus, any charging system for producing control voltages to control trip and close coils disclosed in the Nelson reference is part of the existing, prepackaged line recloser control. The Nelson reference does not disclose a convertible charging system. Each existing, prepackaged line recloser control includes its own active switching functions for operating the recloser with which it is prepackaged. Nelson does not teach that the charging system is convertible. Instead, the Nelson reference teaches an add-on board that communicates with, and is capable of modifying the capabilities and functionality of the existing, prepackaged line-recloser control. *E.g.* Nelson, column 31 lines 14-24.

The Nelson reference does not teach that the existing, prepackaged line recloser control, with or without the add-on board can be used with various reclosers. Further, the Nelson reference does not teach that the add-on board includes any system for producing control voltages to control trip and close coils. Even assuming *arguendo* that the Nelson reference teaches that the add-on board can be used on various recloser controls, Nelson still does not teach that the charging system (contained in the existing, prepackaged recloser control) is

configurable, but instead teaches that the switching functions remain in the existing, prepackaged line recloser control.

The Nelson reference does not teach, therefore, that the add-on board or the existing, prepackaged line recloser control either separately or when combined teach a convertible charging system for use on various reclosers.

Claim Rejections – 35 U.S.C. §102

Examiner has rejected claims 1-3, 5, 8-11, 13-14, 17-22 and 23-24 under 35 U.S.C. §102(b) as being anticipated by the Nelson reference. Examiner concludes that the Nelson reference discloses a recloser control apparatus compatible with various reclosers. In response to Applicant's remarks, Examiner argues that the Nelson reference teaches "that the recloser control apparatus can be used with various existing recloser systems of different control requirements (Column 30, lines 16-67, Column 31, lines 1-36)". Examiner continues "with each system it produces control voltages required for the system." Examiner concludes "[b]ecause it is capable of producing control voltages for each system it would be able to produce corresponding voltage, in another words, [sic] since the system is adaptable, it would necessarily have a convertible charging system."

Applicant respectfully traverses Examiner's conclusions. The Nelson reference does not teach that the *recloser control* can be used with various recloser systems, but instead teaches that the recloser control is an "existing, prepackaged line recloser control". The Nelson reference teaches an add-on board that communicates with the existing, prepackaged line recloser control, but does teach that the add-on board has a system for producing control voltages to control trip and close coils.

Improper Application of 35 U.S.C. §102(b) – "Convertible Charging System" Not Described in the Cited Reference

Applicant respectfully traverses Examiner's rejection of claims 1, 14, and 21 in that not all claimed elements are found, either expressly or inherently described in the cited prior art reference.

Claim 1 requires "a convertible charging system for producing control voltages to control trip and close coils of various reclosers". Claim 14 requires "a convertible charging system

adaptable for producing another control voltage for controlling a trip and close coil for another recloser". Claim 21 requires "a convertible charging system". Applicant respectfully puts forth that the Nelson reference does not describe, either inherently or expressly any of these elements.

As described in detail above, the Nelson reference does not teach a convertible charging system. Instead, the Nelson reference teaches an add-on board for communication with an existing, prepackaged line recloser control. It is the existing, prepackaged line recloser control that includes the active switching functions. The Nelson reference does not teach that the existing, prepackaged line recloser control can be used with various other reclosers or that it includes a convertible charging system. Instead, the Nelson reference teaches an add-on board that communicates with the existing, prepackaged line-recloser system digitally. Nelson does not teach or suggest that the add-on board includes any charging system, so cannot teach or suggest that the add-on board includes a *convertible* charging system. Nelson teaches instead that the add-on board communicates with the existing, prepackaged line recloser control *digitally*.

Thus, the Nelson reference does not teach or suggest that either the add-on board or the existing, prepackaged line recloser control separately or together include a convertible charging system. Applicant kindly requests Examiner to reconsider this rejection.

Because not all elements of the independent claims are described in the Nelson reference, Applicant kindly request reconsideration of all rejections based on the application of the Nelson reference.

CONCLUSION

Applicant respectfully submits that in light of the arguments set forth in this response, this application is now in condition for allowance, and requests that a timely Notice of Allowance be issued. However, should Examiner be of the opinion that further amendments or response is required, Applicant encourages Examiner to contact the undersigned attorney at the telephone number set forth below. Further, although no additional fees are believed to be due at this time, the Commissioner is authorized to charge any additional fees or deficiencies or credit any overpayments to Cook, Alex, McFarron, Manzo, Cummings & Mehler, Ltd., Deposit Account No. 50-1039 with reference to attorney docket number (1444-0097).

Respectfully submitted,

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